

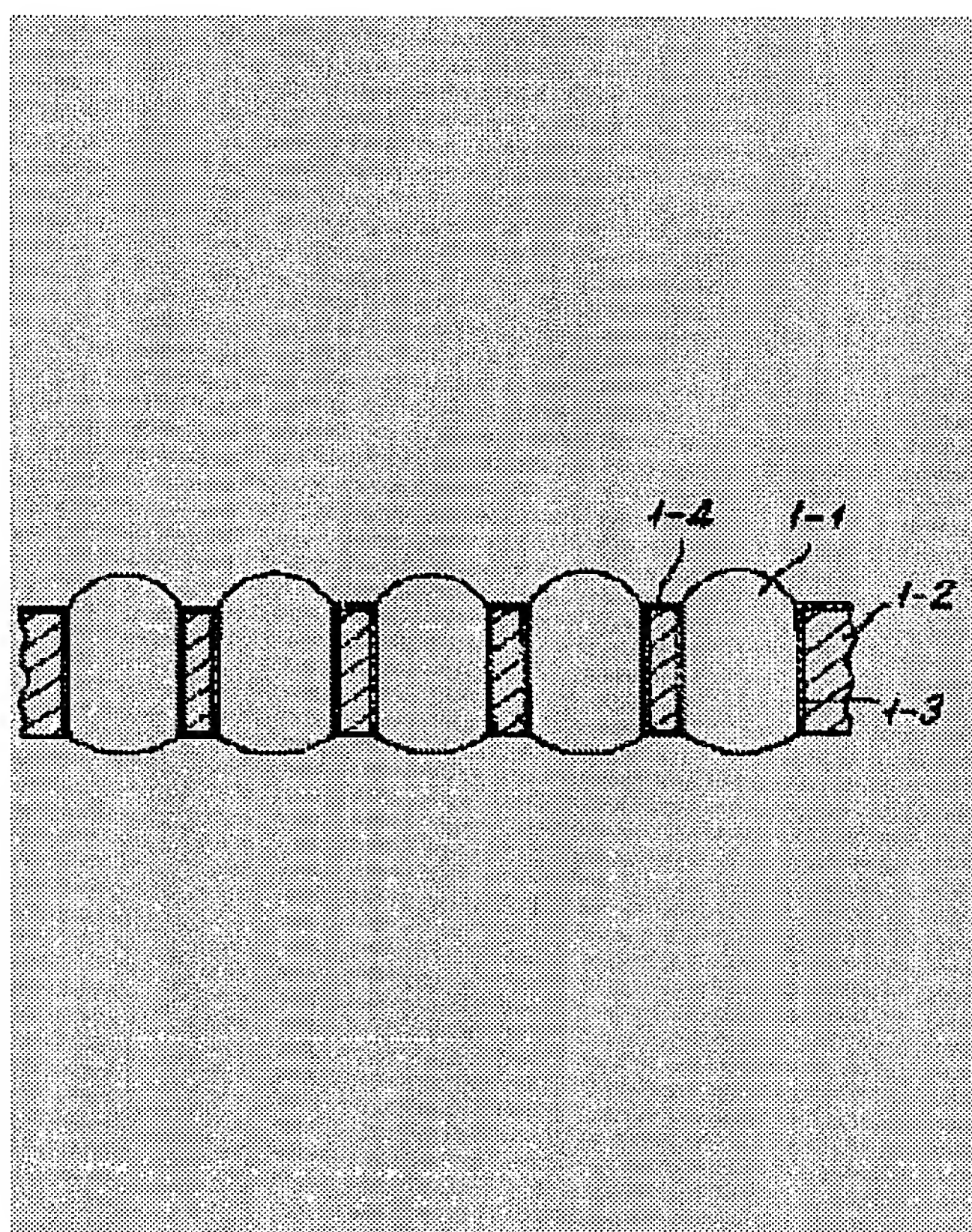
# MICROLENS ARRAY, IMAGE SENSOR AND OPTICAL IMAGE TRANSMISSION ELEMENT

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## Abstract of JP9307697

**PROBLEM TO BE SOLVED:** To improve the depth of field of a micro lens array by supporting fixedly a flat support member having holes at prescribed pitches to a support hole of the support member so as to provide a function of limiting or preventing mutual overlap of images by a plurality of identical micro lenses. **SOLUTION:** A luminous flux made incident from an upper part of each micro lens 1-1 of a micro lens array is refracted at a refraction plane of the incident side, collected once in each micro lens, part of the light is reflected in a light reflection film 1-3 of a support hole wall face, refracted at a lower refraction plane and outputted from each micro lens 1-1. In the micro lens array, a support member 1-2 is of light shut-off property and the size of support holes is selected depending on a pitch of the support hole arrangement so that the overlap of images by the micro lenses 1-1 is limited or prevented. Thus, the support member 1-2 limits or prevents overlapped images by the micro lenses 1-1.



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